

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

**SUBJECT:** Toxicological Review of HW24 Data 28 March 2012  
Dimock, PA

**FROM:** Dawn A. Ioven, toxicologist  
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**TO:** Rich Fetzer, OSC  
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On 27 January 2012, U.S. EPA collected water samples from HW24 in Dimock. The samples were analyzed for over 200 constituents, including volatile organic compounds, semi-volatile compounds, metals and bacteria. The analytical results were then validated and compared to risk-based screening levels and/or standards for public drinking water supplies.

Lithium was reported in an unfiltered sample from HW24 at 204 ug/L; at the kitchen sink, the detected concentration of lithium was 201 ug/L. With a risk-based screening level of 31 ug/L under a long-term exposure scenario, there is a non-cancer threat associated with chronic exposure (Hazard Quotient = 6.6). Under acute exposure conditions, ATSDR has suggested a screening concentration of 1500 ug/L for lithium in drinking water.

Samples collected from HW24 contained sodium at concentrations of 88,000 ug/L (unfiltered) and 84,200 ug/L (filtered) at the wellhead, and 87,200 ug/L at the tap. A quantitative assessment of risk cannot be performed for sodium; however, U.S. EPA has a non-enforceable Health Advisory of 20,000 ug/L for sodium in drinking water. This value is based on recommendations for individuals on sodium-restricted diets

No other constituents were observed at levels of concern in HW24.



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